

**Safety and Aesthetics in Urban Roadway Design**  
**Interdisciplinary Group Meeting**  
May 22, 2003, 9:00 to 3:00 p.m.  
WSDOT Lakewood Project Engineers Office - Conference Room

Members in attendance:

<u>Name</u>	<u>Agency</u>	<u>Phone</u>
Brian Hasselbach	WSDOT – HQ Design Office	360-705-7255
John Milton	WSDOT – HQ Design Office	360-705-7299
Dave Olson	WSDOT – HQ Design Office	360-705-7952
Ted Focke	WSDOT – HQ Design Office	360-705-7270
Mark Maurer	WSDOT – HQ Design Office	360-705-7242
Thera Black	Thurston Regional Planning Council	360-786-5480
Jim Seitz	Association of Washington Cities	360-753-4137
King Cushman	Puget Sound Regional Council	206-464-6174
Rocky Piro	Puget Sound Regional Council	206-464-6360
Lynn Price	City of Bremerton	360-473-5272
Ken Miller	City of Federal Way	253-661-4136
Sally Anderson	WSDOT – NW Region	206-440-4501
Kathy Wolf	UW – Research	206-780-3619
Jim Toohey	WSDOT – Research	360-407-0885
Don Petersen	Federal Highway Administration	360-534-9323
Paul Harker	Federal Highway Administration	360-753-9552
Mark Leth	WSDOT – NW Region Traffic Office	206-440-4484
Al King	WSDOT – Highways & Local Programs	360-705-7375
Julie Matlick	WSDOT – Highways & Local Programs	360-705-7505
Anna St. Martin	WSDOT – HQ Design Office	360-705-7453

Brian Hasselbach welcomed everyone to the meeting and requested that the attendees introduce themselves. He distributed the revised agenda and asked for any additions or alterations to the agenda. Brian then introduced Mark Maurer and Sally Anderson to discuss the status of the Urban Funding Issues Sub-committee and the products it has developed.

**Urban Funding Issues Group:** Mark and Sally discussed the intent of this effort, which is to simply characterize the eligibility for funding of roadside considerations, given the Department's various funding programs' criteria. Mark and Sally then presented the main product from the group's efforts - a matrix, which outlines the various roadside considerations that may be associated with a proposed project and an indication as to whether or not the consideration is eligible for funding, by funding program, and, if eligible, the level of involvement the Department is willing to participate at. The list of considerations attempts to capture most of the elements representative of urban designs, but should not be considered all-inclusive.

Mark indicated that the Department's level of funding, for those considerations deemed eligible for funding, will be defined by the Department's standard for that particular consideration.

Mark also clarified that the category of "not eligible", noted on the matrix, is not an absolute. For example, WSDOT may cover the cost of average street lighting in a project, however, where the city desires fancy lighting, the costs in excess of the standard would be covered by the local agency.

John Milton noted that the Department would replace any roadside features, in-kind, if they are impacted by a WSDOT project – even if the feature exceeds the Department's standards. John also indicated that there are many opportunities for partnering with other agencies that bring partial funding to the project.

John also stated that the matrix is only a draft and still needs to be presented to the Department's Executive Team for review and approval.

The group then engaged in a number of clarification discussions and suggestions, regarding the matrix. The following outlines the highlights of the discussion and decisions.

King Cushman suggested the matrix be titled, "State Capital Projects - Urban Funding Matrix" as a means of clarifying that the matrix is intended 1) only for WSDOT initiated projects; and 2) that the matrix omits any consideration to operations and maintenance costs of roadside considerations. The group agreed the suggested title would clarify the intent and contents of the matrix.

Al King noted that the group has also been discussing the question of where the matrix should be located. King suggested referencing it in the Design Manual with directions to where it would be on the web, such as under state plan, financing, or budgeting, or all three. Dave Olson suggested including the reference in the design matrices section of the *Design Manual*. John noted that was a suggestion discussed at the last Urban Funding Issues group meeting.

The group agreed with this suggestion, and Mark noted that having it on the web would improve the matrix's usefulness (it could be linked to a number of design and programming documents) and clarity, as we would have the ability to hyperlink considerations listed on the matrix to their definitions, standard and references.

A question was raised concerning the level to which the matrix would be updated and modified. Mark and John noted that, like most WSDOT documents, the content of the matrix will be dynamic. King suggested that a statement of "as of (date)" be included on the matrix, as a means of tracking changes. The group agreed with these suggestions.

Jim Seitz questioned whether the people who make the funding decisions would be looking at this matrix – particularly if it is located within the Design Manual. Sally replied that many decision makers would access this information during the scoping phase of the projects.

Mark requested that the group return any comments they may have, to him by the middle of June.

**Urban Roadways - *Design Manual Supplement*:** Ted Focke distributed a draft version of the DM Supplement to the group. He indicated that the main purpose of the supplement was to modify existing WSDOT design criteria for roadways in urban areas, because of concerns that the current standards may be impractical for urban settings. The supplement attempts to bring Full Design Level into better alignment with the reality occurring in the field, in urban areas. In addition, the supplement also addresses topics like raised medians, for example, that are either absent or only minimally addressed in the *Design Manual*.

Lynn Price raised the question about possible conflicts with the Design Manual when modifying existing roadways. Ted responded that the requirements of the Supplement never exceed those of the Design Manual, so if the DM were followed there would be no concern about the Supplement guidelines. John stated that the intent of the supplement is to incorporate the philosophy, with the reality of what is occurring in the urban settings.

Ted indicated that the timeline for the project included the supplement being completed, signed and distributed by July 1, 2003; with a revision following comments received in early fall, and incorporation into the Design Manual in late fall. In response to the option of electronic publication, Al suggested that on the web there should be an option to request a hard copy of the supplement at cost. He noted that many agencies take this option because their printing costs are higher than the cost of WSDOT printing and mailing the supplement.

The group engaged in a series of comment-specific discussions regarding the content of the supplement. The following summarizes the main points of each discussion.

King raised the question as to whether Figure 440-3a on page 6 should indicate that bicycles should be considered on all roads. Ted responded that from personal experience as a bicycle commuter he did not feel the need for bike lanes on all roads. He noted that when speeds and volumes are low a narrower shoulder is not a problem, and during inclement weather the sidewalks are adequate and usually available for bikers. John noted that on many projects the 4' curb is already not included.

John discussed designating bike routes and accommodating bikers on them specifically. King noted the discussion on the need for consistency between jurisdictions needs to be stated and clarified in the section on bike routes and shoulder widths. Al agreed that there must be consistency on bike routes and shoulder widths on roads that cross-jurisdictional

lines. Ted added that the changes in shoulder widths, etc should be driven by changes in speed, not changes in jurisdiction. The group agreed.

Jim Seitz raised the question of how the Department designates bike routes. Julie responded that the state does have designated bike routes, but most of them are rural. A discussion ensued concerning bike routes on state and interstate highways. The difficulties with bikers and overpasses were discussed, but no conclusions were reached.

Al and Ken Miller noted that Figure 440-8 note (10) was confusing. Ted clarified the intent of the note, which was that the raised median needs to be as wide as the two way left turn lane needed on portions of the road, to maintain consistency. Ted and John suggested that a sketch in the text could clarify the note.

Lynn raised the question of when bulb-outs would be included in the *Design Manual*, instead of being treated as a deviation. Ted suggested that Lynn submit his comment in writing to Dave, but that he hoped it would be included in next year.

Ted requested that all comments on the Supplement be submitted to him by June 4, 2003 in either electronic or hard copy format.

**Urban Horticulture/ Forestry Research Project:** Kathy Wolf of the University of Washington Research Division presented her preliminary ideas on new research in the area of roadside design in urban settings. Her research proposal would be attempting to compile empirical data on the trade-offs between safety and community-valued landscaping. To narrow the scope of the project, she proposed investigating the data at sites where trees had been planted near the roadway. She suggested that the theory and methods of “risk management” could apply to this situation.

Suggestions were made by the group as to where she might find the kind of data she needed.

Kathy noted that the project will require 2 years to complete and she will be happy to update the IDG on the project’s progress, at a future meeting.

### **Training Update:**

Brian reported that Julie and he have been engaged in a number of discussions to evaluate options for the development of a CSD-related training for WSDOT and local agency personnel. He noted that a brainstorming session will occur next Thursday, May 29<sup>th</sup>, at the WSDOT HQ building to discuss the goals and objectives for the training. Brian noted that Thera Black and Chris Mudgett, who volunteered at the last IDG meeting, have been invited to the brainstorming session. Anyone else who is interested in attending is welcome.

King suggested the sub-committee get feedback from other states that have implemented similar programs on what worked and what failed. Brian noted that Julie had compiled a

list of the available trainings, including content, and had been in discussion with some of the states to determine what worked, how the training was developed, etc.

Brian stated that comments or thoughts on training are welcome at any time and the group should have additional details on proposed training by the next IDG meeting.

**Companion Document:** Brian began by thanking both authors and reviewers for their work in developing the document to date. While the document is still very much a draft, considerable progress has been made, thanks to the authors' efforts in developing chapters and the IDG's efforts to provide good comments and feedback.

Brian then summarized the points that were agreed to at the last IDG meeting, including:

- Document will address only urban state highways. Document will need to include definitions of “urban” and “rural”, as they are used in the document.
- Allow for flexibility in the chapter format – allow the content to drive format, as opposed to the converse.
- Key issue within the chapters and the document as a whole is how to evaluate trade-offs – important to ensure all judgmental and opinion language is removed from the document.
- Need to include an executive summary at the beginning of each chapter.
- The IDG agreed that the intended audience for this document is broad, including designers/planners, interested/concerned citizens, city council members, and county commissions.

King presented to the group a document, similar to the intent of the companion document, entitled “Flexible Design of New Jersey’s Main Streets”. He discussed its merits, which include that the character of the roadside dictates the design, not the road’s designation, and that the document is easy to understand, well illustrated, and phrased in positive terms. King also distributed a list of CSD-related document references to the group that he and Julie had developed for a recent presentation.

Julie raised the question of whether the document meets the intent of the effort - reducing speeds on urban roads. For example, if this is the intent, she would recommend including more language on how to achieve a reduction in speed, like adding visual clues that the driver is entering an urban area. Dave clarified that the intent is not solely to encourage a reduction of speeds, but in raising the awareness of considerations, in general, associated with urban highway design and striking a balance between needs.

Rocky Piro commented that the document is headed in a good direction, that the new draft is much improved, but that the intent and purpose of the document is not yet nailed down.

Julie noted that the chapters were separate; the content of each was independent, which could lead to designers missing the overall intent of Context Sensitive Design because they reference only one portion.

King indicated that the document's language appeared defensive with more "don'ts" than "dos". He noted that some things are better not said, allowing for implied judgment. He suggested that the specialties of the authors influenced the perspective of chapters, and he recommends neutralizing the language. Julie agreed and added that the document took the perspective of the vehicular travelers, with limited acknowledgment of the pedestrians and bicyclists.

Rocky brainstormed a list of preliminary Urban and Rural environmental settings that need to be addressed, for a given consideration:

**Urban**

- Centers
- Activity areas, "nodes"
- *Developed* corridors
- Main street
- Suburban

**Rural**

- Corridors
- Town centers
- "Transition"

Jim Toohey raised the question of whether the document needs to address the identification of the community, in order to define its goals for each project. Dave responded that we consciously excluded detailed language in that regard, because the document "Building Projects that Build Communities" addresses that issue and we can simply reference it in the companion document. The group agreed that some expanded language in the companion document may be appropriate to adequately cover this issue.

Kathy noted that the document could be viewed as a comprehensive checklist.

King stated that the document, as is, has good information but suggested the IDG investigate the possibility of hiring a consultant for assistance in editing the document, including neutralizing the language and improving the formatting and graphics. The discussion continued, though the conclusion was reached that a consultant was probably out of the question because of the Department's existing budget constraints. King also questioned if the document overstepped its purpose, and was too inclusive. Some standards are adequate and do not need modifications he noted. John replied that "too much" might not be too bad.

Sally suggested that case studies could be a good way to encourage a holistic approach/perspective to the situations encountered by the users of the document. King added that the organization of the document could encourage a fuller understanding of its intent: topics in chapters, case studies, and appendices with elaboration and greater specifics.

The question was raised as to whether the length of the document is becoming too excessive. The group determined that the current level of information is appropriate, but the document needed to be augmented with executive summaries and case studies, in

order to adequately tie the content together and provide abbreviated summaries of content, if desired by a reader.

Julie continued the thought on case studies, and suggested including visual summaries such as matrices/figures that include the design considerations for each general situation such as a suburban corridor, a small town, and larger urban areas. The tables could list the design considerations and then reference the chapters in the document that address those topics.

Other suggestions for enhancing the accessibility of the document to the wide audience included publishing “student” and “teacher” versions (Kathy) the second having all the detail necessary for actual design, while the first covers the general considerations and concepts of Context Sensitive Design; and publishing a collective executive summary of the document separately (Ted).

Brian suggested the group address specific comments on the chapters in the upcoming review session. Brian and Dave thanked the IDG members for their continued assistance in reviewing and editing the document – both recognized the time and effort that goes into the review sessions and noted the value of the comments in continuing to shape and develop the document. Brian also noted the importance of taking time to comment, as the intent is for the document to be a product of the IDG – as opposed to a WSDOT or local agency document.

Brian requested that all comments, including suggestions for the document’s title, be directed to him either electronically at [Hasselb@wsdot.wa.gov](mailto:Hasselb@wsdot.wa.gov) or via marked-up hard copy to the address below:

Brian Hasselbach  
WSDOT Design Office  
Policy, Standards, and Safety Research Unit  
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**Wrap Up:** The next IDG meeting will be scheduled for late August. Brian will send out an announcement of date and location, upon availability.

**Action Items:**

- Brian will send out an e-mail outlining the next round of reviews for the companion document, along with a request for title suggestions for the document.
- Any comments on the Urban Funding Issues Group’s draft matrix need to be transmitted to Mark Maurer at [maurerm@wsdot.wa.gov](mailto:maurerm@wsdot.wa.gov), by June 13<sup>th</sup>.
- Any comments on the draft Urban Roadways *Design Manual* Supplement need to be transmitted, by June 4<sup>th</sup>, to Ted Focke at [focket@wsdot.wa.gov](mailto:focket@wsdot.wa.gov) or

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